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The runner hub for the second Tsimlyanskaya GES hydroturbine has been machined, and the stator castings are now undergoing machining. The shaft of the third hydroturbine has been completed.

Moscow, Trud, 27 Jul 51

The first hydroturbine for the Tsimlyanskaya GES has been completed at the Leningrad Metal Plant imeni Stalin. It has performed satisfactorily on plant tests, and is being readied for shipment to the GES builders.

Moscow, Trud, 1 Sep 51

The Leningrad Metal Plant imeni Stalin has completed the second powerful [hydro] turbine for the Tsimlyanskaya GES.

Moscow, Pravda, 2 Oct 51

The Leningrad Metal Plant imeni Stalin has completed the third hydroturbine for the Tsimlyanskaya GES, and has shipped about 40 percent of its parts to the GES site.

Moscow, Pravda, 11 Nov 51

The steam turbine shop of the Leningrad Metal Plant imeni Stalin produced in 10 months of 1951 the equivalent of all the turbines it turned out during 1950.

The first parts of a giant 150,000-kilowatt high-pressure turbine are appearing in the shop. It will be the first turbine of such capacity in the world. The efficiency of this turbine will be 10 percent higher than that of ordinary high-pressure turbines.

Frunze, Sovetskaya Kirgiziya, 5 Dec 51

The Leningrad Metal Plant imeni Stalin has completed a 100,000-kilowatt steam turbine, putting it through plant tests in the record time of 10 days.

Moscow, Pravda, 12 Jan 52

The Leningrad Metal Plant imeni Stalin has completed a powerful hydroturbine. It was completed 10 days more rapidly than the third hydroturbine for the Tsimlyanskaya GES, which is of the same type.

Vil'nyus, Sovetskaya Litva, 13 Jan 52

The Leningrad Metal Plant imeni Stalin has completed a powerful hydroturbine for the Tsimlyanskaya GES.

Leningradskaya Pravda, 24 Jan 52

A milling machine operator at the Leningrad Metal Plant imeni Stalin reports that problems frequently arise in the blading shop which require scientific assistance, and that scientists, unfortunately, rarely put in an appearance at these times. He says that scientific aid is especially required in perfecting high-speed methods of milling alloyed steel.

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Chief Engineer Bushuyev states that the plant has worked closely with representatives from scientific and technical institutes throughout the country, including the Polytechnical Institute imeni Kalinin, the Central Boiler and Turbine Institute imeni Polzunov, Leningrad University imeni Zhdanov, and the Central Scientific Research Institute of Heavy Machine Building. The Polytechnical Institute imeni Kalinin helped with the new 150,000-kilowatt steam turbine which the plant is now building.

FAIL TO PUT MINISTER'S ORDER INTO EFFECT -- Moscow, Izvestiya, 3 Jul 51

The Khar'kov Turbogenerator Plant is staffed with first-class technicians and workers. It has filled orders from power projects on the Volga, Don, Dnepr, and Amu-Dar'ye rivers. High-speed machining methods are applied at the plant, and hundreds of its Stakhanovites are regularly exceeding their norms. Yet the plant has for some time failed to meet its plan, and the directors were criticized during a session of the Supreme Soviet USSR for poor utilization of working capital.

The situation at the plant has caused some concern in the Ministry of Heavy Machine Building. On 29 December 1950, Minister Kazakov issued order No 1620, pointing out in great detail the counts on which the plant was regularly falling short of the plan, and citing as causes long, drawn-out production cycles, disregard of advanced technology, idle production equipment, and poorly organized supply of semifabricated parts to the plant. As a result, the plant suffered a loss of over 3 million rubles during 11 months of 1950. The minister's order went on to set forth a program which would help the plant overcome its difficulties. Kitor, chief of the Main Administration of the Boiler and Turbine Industry, was put in charge of the program, which comprised a list of measures to be taken, with reasonable time limits for their fulfillment. A worker from either the ministry or the plant was made responsible for each point contained in the program.

Six months have passed since issuance of the order containing the improvement program. During this time, Kazakov and Kitor made two trips each to the plant, while an almost endless stream of other personages has been coming and going. There has been no change, however.

The plant production plan is not being met. During 5 months of 1951, losses from defective items amounted to 3,749,000 rubles. During the period January - April, a profit of only 582,000 rubles was made, as against a planned profit for that period of 2,358,000 rubles. For failure to meet contract obligations, the plant has had to pay out 944,000 rubles in fines; late payment of bills has cost the plant an added 501,000 rubles.

It is obvious that no one is checking on the fulfillment of the minister's order. Each month, the plant sends Kazakov a detailed report, noting the extent to which the various points of the improvement program have been fulfilled, and indicating the person who is to blame in cases where they are not being fulfilled. The reports show that many points of the program are ignored with impunity by the persons who are supposedly fulfilling them, including representatives of the ministry.

The minister's order incorporated many measures designed to improve cooperation between the Khar'kov Turbogenerator Plant and other plants of the Ministry of Heavy Machine Building. It was suggested to Katerinich, director of the Novo-Kramatorsk Plant; Chumichev, director of the Sverdlovsk Uralmash Plant; and Vinogradov, director of the Elektrostal' Machine-Building Plant /Elektrostal' Novo-Kramatorskiy Plant imeni Stalin ?/ that they replace certain defective housing castings which their plants had sent to the Khar'kov

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Turbogenerator Plant, that they exercise stronger control over the quality of their products, and that they strictly observe their contractual obligations. The replacement castings did not arrive in January or in February. Kazakov sent two more letters to the plant directors, demanding compliance with the points of his order. Four more months passed, and the situation remained unchanged.

Vinogradov, disregarding the main points of the minister's suggestion, has not replaced a single one of the defective castings, and it was not until May that the Novo-Kramatorsk Plant sent a consignment of parts for a high-pressure turbine -- a consignment, incidentally, which did not constitute a complete set. The repair of castings from the supplying plants cost the Khar'kov Turbogenerator Plant 1,970,000 rubles during a 5-month period.

No one will admit to responsibility for the production of defective items. In December, Director Katerinich of the Novo-Kramatorsk Plant should have sent his representative to Khar'kov in order to determine to what extent both plants are responsible for the defective items and to institute the keeping of two-way charge sheets on them. It was not until 4 months after this, however, that the representative arrived. He finally got to work on 5 May, but not for long; in June, the minister retracted this part of his original order.

As a result, the losses suffered from production of defective items are falling not on the supplying plants which release them / in the form of castings /, but on the Khar'kov Turbogenerator Plant. In May, for example, the Khar'kov plant spent 725,000 rubles on the repair of castings which it had received, but was able to present claims for only 216,000 rubles, since there were no two-way charge sheets kept on defective items.

The question of what to do about the quality of the castings produced by the Turbogenerator Plant itself is still in abeyance. During 5 months, losses from rejects amounted to 1,799,000 rubles. Each month the enterprise wastes a great deal of iron, brass, bronze, rabbit metal, stainless steel, and other valuable materials. Realizing the help which the plant's foundry technicians needed, the minister ordered Shamin, chief metallurgist of the ministry, to present to the Khar'kov Plant by 1 February 1951 a program for casting turbine parts, containing appropriate technological data. This program has not yet been submitted.

For the steam turbine shop, one of the most important shops in the plant, the minister's order prescribed a three-shift schedule for the special equipment. The plant directors, however, were indifferent toward this plan. Consequently, high-duty machine tools have continued to run below their capacities, and thousands of machine-tool hours are being lost as productive equipment is allowed to stand idle.

As for the plant's over-all production rate, last minute speed-ups are still the rule.

The unsatisfactory results which the order of the Minister of Heavy Machine Building has had show that the minister's attitude is restricted by formalism. He issued an order and put Kitov in charge of checking up on the fulfillment of that order; yet he failed to demand that all workers under him execute all the measures of the order completely and uncompromisingly.

The Khar'kov Turbogenerator Plant, in the meantime, continues to lag, and still needs substantial aid.

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Moscow, Moskovskaya Pravda, 6 Oct 51

A special assembly brigade from the Khar'kov Turbogenerator Plant has installed one of its turbogenerators at the Stalingrad GES site. The plant is now working on another similar high-pressure turbogenerator for the Kuybyshev GES. The steam turbine shop has already completed the basic machining of the rotor for the new turbogenerator.

PLANT BACK ON PRODUCTION SCHEDULE -- Yerevan, Kommunist, 4 Jul 51

The Yerevan Small Hydroturbines Plant, which not long ago was running behind its production plan, is now back on schedule, and is among the leading enterprises of the republic.

The plant is now establishing the production of a new medium-power hydro-turbine. The 2.5-ton spiral chamber for the first of these machines has already been cast.

TO PRODUCE TURBINES FOR TSIMLYANSKAYA GES -- Moscow, Pravda, 26 Nov 51

The Sverdlovsk Ural Hydraulic Machinery Plant is preparing to produce turbines for the Tsimlyanskaya GES project.

BUILD TURBINE BLADES FOR GES PROJECTS -- Moscow, Moskovskaya Pravda, 20 Dec 51

The Elektrostal' Novo-Kramatorskiy Plant has turned out a set of spare turbine blades for the builders of the Tsimlyanskaya GES.

Moscow, Moskovskaya Pravda, 12 Jan 52

The Elektrostal' Novo-Kramatorskiy Plant is working on turbine blades destined to go to the GES projects on the Volga, and to the site of the Kama GES.

Moscow, Moskovskaya Pravda, 13 Feb 52

The Elektrostal' Novo-Kramatorskiy Plant has turned out 24 blades for the Tsimlyanskaya GES builders. In OO-W-20244 it is stated that the hydroturbines at the Tsimlyanskaya GES are to have six blades each. Thus the Elektrostal' Novo-Kramatorskiy Plant has turned out the blade castings for four hydroturbines.

The Elektrostal' Novo-Kramatorskiy Plant is the only plant in the USSR which casts turbine blades for the hydroelectric stations. During the post-war Five-Year Plan, the plant cast over 100 blades.

The plant now has before it the task of turning out additional parts for the great construction projects. A new order calls for blades which will be four times as large as the ones turned out for the Tsimlyanskaya GES.

Each blade cast for the giant GES (presumably the Stalingrad and Kuybyshev GES) will require at least 30 tons of stainless steel, not counting the metal going into the blade root (pribyl'). Since one of the plant's electric furnaces is not capacious enough to hold all the metal required to cast one of these blades, an open-hearth furnace will also be used. The feather of the blade will be of stainless steel. The flange and root of the blade, to be of ordinary metal, will be poured from an open-hearth furnace.

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START WORK ON KUYBYSHEV ORDER -- Stalinabad, Kommunist Tadzhikstana, 2 Feb 52

On 1 February the Novo-Kramatorsk Plant imeni Stalin received an order from the builders of the Kuybyshev GES to make the first units for the gigantic hydroturbines which are to be installed there. The plant has already begun work on this order, and a space has been cleared in the shaped-castings shop for the molds in which huge parts, each one requiring as much as 150-180 tons of molten steel, will be cast. The turbine shaft, which will weigh 115 tons, will be cast in a mold for which a pit 8 meters wide and 5 meters deep had to be dug.

The welders are putting into operation a special device used in welding stators for hydroturbines.

SEEK ELIMINATION OF ICE DANGERS AT TURBINE INTAKES -- Moscow, Pionerskaya Pravda, 26 Jun 51

The Ice and Thermal Laboratory of the Leningrad All-Union Institute for Hydraulic Technology imeni Vedeneyev is conducting a series of experiments aimed at determining the manner in which ice forms under water, and the effect of wind on the speed of floating ice masses. It is hoped that a solution will be found to the problem of the ice which frequently forms on the gratings in front of hydroturbine intake chambers, and which impedes or stops the flow of water, and sometimes passes through to the runner, damaging the blades.

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